DOLI Virginia Occupational Safety and Health VOSH

VOSH PROGRAM DIRECTIVE: **12-223A** **ISSUED**: **December 15, 2005**

SUBJECT: **General Requirements for Clearances, Construction of Electric Transmission and Distribution Lines and Equipment, Construction Industry, Subpart V, §1926.950 (c)(1)(i) 16 VAC 25-155; and Repeal of 16 VAC 25-175-1926.950 (c)(1)**

A. **Purpose**.

This directive transmits to field personnel the above-referenced Virginia unique standard for the construction industry and provides construction employees with the same degree of protection afforded in general industry for similar job tasks on power lines.

This Program Directive is an internal guideline, not a statutory or regulatory rule, and is intended to provide instructions to VOSH personnel regarding internal operation of the Virginia Occupational Safety and Health Program and is solely for the benefit of the program. This document is not subject to the Virginia Register Act or the Administrative Process Act; it does not have general application and is not being enforced as having the force of law.

B. **Scope**.

This directive applies to all VOSH personnel.

C. **Reference**.

Not Applicable.

D. **Cancellation**.

VOSH Program Directive 12-223 (May 1, 2005).

E. **Action**.

Directors and Managers shall ensure that field personnel understand and comply with the Virginia unique standard included in this directive and instructions for IMIS data entry.

F. **Effective Date**.

December 15, 2005.

G. **Expiration Date**.

Not Applicable.

H. Background.

The need for this unique regulation was made evident during a VOSH investigation of a fatal accident. A construction electrical transmission employee, who was wearing properly rated insulating gloves and sleeves, was fatally electrocuted when he apparently touched an uninsulated 7600-volt power line with his neck and/or shoulder. The victim was working on one energized electrical part, and was effectively insulated from it through the use of gloves with sleeves as required in the federal standard. However, he was not protected from accidental contact with other live electrical parts in the immediate or adjacent work area which caused his death.

On December 2, 2002, the Department requested authorization from the Safety and Health Codes Board to initiate the regulatory process by filing a Notice of Intended Regulatory Action (NOIRA), pursuant to Virginia Code §2.2-4007, to amend §1926.950 (c)(1)(i), thereby making it identical to its general industry standard counterpart, §1910.269(l)(2)(i). No comments were received on the regulation during the comment periods, including the public hearing which was held on April 21, 2004. On August 3, 2004, the Safety and Health Codes Board adopted the final version of this regulation, which became effective on January 1, 2005.

I. Summary.

Along with the promulgation of the Virginia unique regulation, 16 VAC 25-155, the less effective federal identical standard,16 VAC 25-175-1926.950 (c)(1)(i), Clearances, was repealed. The language of the new unique regulation provides construction industry employees working on live electrical transmission lines with safety protections identical to those under the general industry standard at 16 VAC 25-90-1910.269(l)(2)(i).

The federal identical construction industry standard specifies that the wearing of protective gloves and sleeves alone would qualify as sufficient protection from any live electrical part in the general area where the employee was working, not just the part upon which work was being performed.

The effect of the federal identical construction industry standard is that a construction employee may be exposed to many uninsulated live electrical parts in the work area, but is only actually required to be protected from contact with them through the use of gloves with sleeves. There is no protection to prevent contact with other body parts or conductive objects.

Like the general industry standard, this unique construction standard specifies that the wearing of protective gloves and sleeves only qualifies as insulation for the live electrical part upon which the employee is actually working then goes further by requiring that additional protection for all other live or

"hot" electrical parts and power lines close to the immediate work area must also be insulated so an employee could not accidentally contact some other energized part or power line with an uninsulated part of his body, or other conductive object(s).

J. Citation Issuance.

Violations of the Virginia unique standard for General Requirements for Clearances, Construction of Electric Transmission and Distribution Lines and Equipment in the Construction Industry shall be listed on the citation as violations of 16 VAC 25-155 (plus the appropriate sub-section).

K. IMIS Entry Coding.

Please review the attachment to this directive for the actual regulatory text of the Virginia Unique Standard, **16 VAC 25-155**. Data on violations of this Virginia unique standard dealing with High Voltage in the Construction Industry (HVCI) shall be entered into the IMIS database as follows:

Part	Section	Paragraph	Subparagraph
HVCI	0950	A	1
HVCI	0950	A	2
HVCI	0950	A	3

C. Ray Davenport
Commissioner

Attachments: 16 VAC 25-175-1926.950 (c)(1), General Requirements – Clearances

16 VAC 25-155, General Requirements for Clearances, Construction of Electric Transmission and Distribution Lines and Equipment, Construction Industry

Distribution: Commissioner of Labor and Industry
Assistant Commissioner – Programs
Directors and Managers
VOSH Compliance Staff
Cooperative Programs Staff
Legal Support Staff
OSHA Regional Administrator, Region III
OSHA Area Office, Norfolk

16 VAC 25-155, Amendment to General Requirements for Clearances, Construction of Electric Transmission and Distribution Lines and Equipment, Construction Industry, Subpart V, and Repeal of 16 VAC 25-175-1926.950 (c)(1)

As Adopted by the

Safety and Health Codes Board

Date: August 3, 2004

VIRGINIA DEPARTMENT OF LABOR AND INDUSTRY

VIRGINIA OCCUPATIONAL SAFETY AND HEALTH PROGRAM

VIRGINIA DEPARTMENT OF LABOR AND INDUSTRY

Effective Date: January 1, 2005

16 VAC 25-155, Amendment to General Requirements for Clearances, Construction of Electric Transmission and Distribution Lines and Equipment, Construction Industry, Subpart V

When the regulations, as set forth in 16 VAC 25-155, General Requirements for Clearances, Construction of Electric Transmission and Distribution Lines and Equipment, Construction Industry, Subpart V, are applied to the Commissioner of the Department of Labor and Industry and/or to Virginia employers, the following federal terms shall be considered to read as below:

Federal Terms	VOSH Equivalent
29 CFR	VOSH Standard
Assistant Secretary	Commissioner of Labor and Industry
Agency	Department

GENERAL REQUIREMENTS - CLEARANCES
16 VAC 25-175-1926.950 (c)(1)

(c) Clearances. The provisions of ~~paragraph (c)(1) or~~ 16 VAC 25-155 or paragraph (2) of this section shall be observed.

~~1) No employee shall be permitted to approach or take any conductive object without an approved insulating handle closer to exposed energized parts than shown in Table V-1 unless:~~

~~(i) The employee is insulated or guarded from the energized part (gloves or gloves with sleeves rated for the voltage involved shall be considered insulation of the employee from the energized part), or~~

~~(ii) The energized part is insulated or guarded from him and any other conductive object at a different potential, or~~

~~(iii) The employee is insulated from any other exposed conductive object(s), as during live-line bare-hand work.~~

GENERAL REQUIREMENTS FOR CLEARANCES, CONSTRUCTION OF ELECTRIC TRANSMISSION AND DISTRIBUTION LINES AND EQUIPMENT, CONSTRUCTION INDUSTRY 16 VAC 25-155

16 VAC 25-155. General Requirements

A. No employee shall be permitted to approach or take any conductive object without an approved insulating handle closer to exposed energized parts than shown in subsection B (Table V-1) unless:

1. The employee is insulated or guarded from the energized part (insulating gloves or insulating gloves and sleeves worn in accordance with 16 VAC 25-90-1910.269 (l)(3) are considered insulation of the employee only with regard to the energized part upon which work is being performed), or

2. The energized part is insulated or guarded from him and any other conductive object at a different potential, or

3. The employee is isolated, insulated, or guarded from any other exposed conductive object(s), as during live-line bare-hand work.

B. Alternating Current - Minimum Distance

GENERAL REQUIREMENTS FOR CLEARANCES, CONSTRUCTION OF ELECTRIC TRANSMISSION AND DISTRIBUTION LINES AND EQUIPMENT, CONSTRUCTION INDUSTRY
16 VAC 25-155

TABLE V-1 - ALTERNATING CURRENT - MINIMUM DISTANCES

Voltage range (phase to phase) (kilovolt)	Minimum working and clear hot stick distance
2.1 to 15	2 ft. 0 in.
15.1 to 35	2 ft. 4 in.
35.1 to 46	2 ft. 6 in.
46.1 to 72.5	3 ft. 0 in.
72.6 to 121	3 ft. 4 in.
138 to 145	3 ft. 6 in.
161 to 169	3 ft. 8 in.
230 to 242	5 ft. 0 in.
345 to 362	(1)7 ft. 0 in.
500 to 552	(1)11 ft. 0 in.
700 to 765	(1)15 ft. 0 in.

Footnote (1) NOTE: For 345-362 kv., 500-552 kv., and 700-765 kv., minimum clear hot stick distance may be reduced provided that such distances are not less than the shortest distance between the energized part and the grounded surface.